

### CLAIMS

1. A vessel-mounted concrete mixing system comprising:

- 5 (a) at least one rotary mixing drum adapted to receive mix and discharge concrete batch ingredients; and
- 10 (b) a conveyor system situated to receive mixed concrete material discharge from said one or more rotary mixing drums and convey said mixed concrete material to a location on said barge accessible by an off-loading device not situated on said barge.

2. A vessel-mounted concrete mixing system comprising:

- 15 (a) a vessel having a deck elevated above the water line;
- (b) at least one rotary mixing drum mounted on said deck to receive, mix and discharge concrete batch ingredients; and
- 20 (c) a conveyor system for conveying mixed concrete batch material discharged from said one or more rotary mixing drums, said conveyor system conveying said discharge mixed concrete to a portion of said barge accessible by an off-
- 25 loading device not mounted on said barge.

3. A vessel-mounted concrete mixing system as in claim 1 further comprising a pair of opposed rotary mixing drums disposed to discharge mixed concrete batch ingredients onto a common conveyor.

30 4. A vessel-mounted concrete mixing system as in claim 2 further comprising a pair of opposed rotary mixing drums disposed to discharge mixed concrete batch ingredients onto a common conveyor.

5. A vessel-mounted concrete mixing system as in claim 2 further comprising an elevated platform and a controllable discharge chute system at the end of said conveyor system for off loading mixed concrete material.

5 6. A vessel-mounted concrete mixing system as in claim 2 wherein said conveyor system includes a pair of conveyors including a first conveyor which feeds discharged mixed concrete material to a second conveyor wherein said second conveyor has an elevated mechanized  
10 discharge chute.

7. A vessel-mounted concrete mixing system as in claim 2 further comprising rotating discharge chute systems connected to said one or more mixing drums, said chute systems being capable of operating between  
15 discharge and cleanout positions.

8. A vessel-mounted concrete mixing system as in claim 7 wherein said rotating chute systems discharge into a gray water sump in the cleanout position.

9. A vessel-mounted concrete mixing system as in  
20 claim 2 wherein said conveyor system further comprises a generally level first conveyor for receiving the output of said one or more rotary concrete mixing drums, said first conveyor, in turn, discharging onto a second conveyor having an elevated head pulley which leads to a  
25 controllable output chute for off-loading said mixed concrete.

10. A vessel-mounted concrete mixing system as in claim 9 wherein said first conveyor further includes a conveyor feed hopper mounted above said conveyor for  
30 receiving material discharged from said one or more mixing drums and a drip pan located beneath said conveyor for catching any spillage, wherein said drip pan drains into a water sump.

11. A vessel-mounted concrete mixing system as in claim 2 comprising a control system including means for controlling the operation of said one or more rotary concrete mixing drums and said conveyor system.

5 12. A vessel-mounted concrete mixing system as in claim 11 comprising a control system further including controls for operating associated swivel-mounted discharge chutes.

10 13. A vessel-mounted concrete mixing system as in claim 1 wherein said vessel is a barge.

14. A vessel-mounted concrete mixing system as in claim 2 wherein said vessel is a barge.

15 15. A method of supplying mixed concrete from a water borne vessel comprising the steps of:

(a) providing a vessel-mounted concrete mixing system as in claim 2;

(b) supplying said vessel with ingredients to be mixed; and

(c) off-loading mixed concrete from said vessel.

20 16. A vessel-mounted concrete mixing system as in claim 1 wherein said control system is operated from a control location.

25 17. A vessel-mounted concrete mixing system as in claim 12 wherein said control system is operated from a control location.